($H_2O + O_2$) fed to the semiconductor manufacturing equipment to such an extent that it can no longer be used for manufacturing high performance semiconductors.

2. Please replace the paragraph on page 3, lines 12-19, beginning with "A first point…," with the following new paragraph:

A first point is that because the mixture gas C of hydrogen and oxygen and argon is introduced into the reaction pipe 54, a reactivity degrades as compared with a case in which only hydrogen and oxygen are supplied, and as a result, the reactor size is increased. In particular, there is a case in which hydrogen or inert gas is added to water to adjust an oxidation-reduction power, and N_2O, etc. are added to water in order to improve interface characteristics of Si and SiO_2, and in such event, an increase of the reactor size results in an increase of gas consumption rate, posing a serious problem from a standpoint of economy, etc.

3. Please replace the paragraph on page 10, lines 16-17, beginning with "Fig. 21 is…," with the following new paragraph:

Fig. 21 is a diagram showing a relationship between mixture-gas-flow rate and remaining O_2 in a case of a nickel filter (Test 3);

4. Please replace the paragraph on page 18, line 21 to page 19, line 1, beginning with "That is, oxygen…," with the following new paragraph:

That is, oxygen gas O_2 is mixed with water spouted from the reactor 1, and the mixture gas of H_2O and O_2 is heated to about 120°C by the heater 5a to prevent dew condensation of H_2O on pipe walls, and then supplied to the semiconductor manufacturing equipment 6.

5. Please replace the paragraph on page 25, lines 11-13, beginning with "In Fig. 14...," with the following new paragraph:

In Fig. 14, MFC0-4 designate mass flow controllers, RP a vacuum pump, and T a tank. As a reactor 1, a nickel pipe (inner surface area 273 cm^2) 1/4 inch inside diameter and 2 m long is used.

6. Please replace the paragraph on page 32, line 24 to page 33, line 5, beginning with "Then, in order...," with the following new paragraph:

Then, in order to investigate the catalytic activity of the platinum coating layer, the inventors of this application carried out water generation tests by forming 300 - 400Å platinum coating film on both outer surfaces of a Ni thin sheet (0.1 mm thick x 5 mm wide x 50 mm long, surface area: about 10 cm^2), using ion sputtering equipment. As is shown in Figs. 36 and 37, a reactor is used which is constructed by inserting two pieces of Ni thin sheets N provided with the above mentioned Pt coating into a 1/4" Hastelloy pipe about

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200 mm long, wherein 50 cc/min. of H_2 and 50 cc/min. of O_2 and 200 cc/min. of N_2 were fed into the inside of the reactor pipe from one end.

7. Please replace the paragraph on page 34, line 26 to page 35, line 5, beginning with "By analyzing the surface…," with the following new paragraph:

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By analyzing the surface of the Pt coating film on the Ni thin sheet after catalytic activity is lost, causes of the sudden loss of catalytic activity of the Ni thin sheet with the Pt coating have been confirmed to be due to a temperature rise of the Ni thin sheet caused by reaction heat causing substrate metal (Ni) to diffuse into the Pt coating film, and this is oxidized in the Pt coating film by the oxidizing environment. As a result, when the platinum coating film is formed on the surface of the Ni thin sheet, as described above, there is a possibility of losing the catalytic activity, and therefore, the problem of its stability as a reactor remains.

8. Please replace the paragraph on page 38, lines 6-11, beginning with "In this test…," with the following new paragraph:

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In this test example 6, the film thickness was designed to be about 250Å but it has been confirmed by test results that if the film thickness were 10Å or more, a specified reactivity (about 98% or more) can be obtained. In the case of a cladding process or hot press process, a comparatively thick film can be formed, but from the viewpoint of economy, an upper limit of the film thickness is selected to be around 0.5 mm.

9. Please replace the paragraph on page 40, lines 15-20, beginning with "In No. 2 test," with the following new paragraph:

In No. 2 test (test was started with H_2: 250 cc/min.; O_2: 250 cc/min., and reactor temperature adjusted at 120°C and the heater 19 was turned off midway), temperature d_2 of the gas inlet end portion of the reactor body member (flange) 13 rose by about 100°C and at the same time, temperature of the other portions exceeded the initial adjusted temperature of 120°C due to reaction heat generated, and the reactivity was 99.75%.

10. Please replace the paragraph on page 42, lines 12-14, beginning with "A recess 22a...," with the following new paragraph:

A recess 22a, whose bottom surface is spherical, is provided inside one of the reactor body member 22, and a gas passage 24a of the gas supply joint 24, which is mounted on a rear surface, is in free communication with the recess 22a.

IN THE CLAIMS:

Please cancel claim 56 without prejudice.

Kindly amend claims 47 and 58-60, and add new claims 81-83 as follows.

47. (Amended) A water-generating reactor comprising: